

CLAIMS

1. An arrangement for the insertion, into a vein, of a cannula composed of a short catheter (1) with a proximal base (2), where this arrangement includes a needle (3) which has a puncture end (3a) and a cage (5) which extends the base of the cannula in the proximal direction, where this chamber forms a chamber (13) through which the needle slides from a proximal entrance (14) to a distal exit (16), and is equipped with a trap to hold the puncture end of the needle in the chamber when the needle is withdrawn from the catheter base, with the cage and the base being equipped with retention resources that combine so as to perform temporary retention of the cage on the base before the puncture end of the needle is trapped in the chamber of the cage, with the said retention resources including an external rim (23) formed on the base, and an external dog (11) provided on the cage to be held by this rim, characterised in that the dog is formed on a mobile device (9, 10) which includes a wall (10) traversed by a hole (12) for the passage of the needle so that the passage of the needle in the hole holds the dog in a retention position, the said wall (10) being mounted to slide in the chamber of the cage in a direction that is transverse to the needle, between a down held position and an up released position, so that when the needle is withdrawn into the cage until it has moved to the rear of the said hole, the wall (10) which is not traversed by the needle can slide to its up position, lifting the said dog and allowing the cage to separate from the catheter base.

2. An arrangement according to claim 1, in which the said dog (11) is formed at the end of a wall (9) of the retention device which is at right angles to the sliding wall (10).

3. An arrangement according to claim 1 or 2, in which the said rim (23) and/or the said dog (11) has a ramp (24) so that a reverse movement of the cage in the proximal direction causes the dog to lift when the needle (3) no longer traverses the said hole (12).

4. An arrangement according to any one of claims 1 to 3, and which includes resources (21, 22) in order to limit the lifting of the sliding wall in the up position.

5. An arrangement according to any one of claims 1 to 4, and which includes resources (8, 8) to prevent the mobile device returning to the down position after it has reached the up position.

6. An arrangement according to any one of claims 1 to 5, in which the cage (5) is formed of a rear part (6) which constitutes the chamber (13) and the entrance (14) of the chamber, and a front part (7) which includes a transverse wall (15) which closes off the said chamber and which includes the exit (16) from the chamber, this transverse wall (15) forming a slide for the said sliding wall (10) of the said retention device, these two parts (6, 7) being held together by a click-on action of nipples (18) provided on the sides of the transverse wall of the front part, in holes (19) formed in the wall of the chamber of the rear part, or vice versa.

7. An arrangement according to claim 6 in which, ahead of the said transverse wall (15), the front part (7) of the cage constitutes a nose (17) designed to fit into in the catheter base.

8. An arrangement according to any one of claims 5 to 7, in which the said transverse wall (15) of the front part (7) of the cage includes a nipple (21) which slides in an oblong aperture (22) of the sliding wall of the retention device in order to limit the lifting of the mobile device.

9. An arrangement according to any one of claims 5 to 8, in which the said sliding wall (10) of the retention device has flexible and elastic lateral legs (8, 8) which are constrained by rims (25) formed in the transverse wall (15) of the front part (7) of the cage for as long as the said device has not yet reached the up position, and which deploy when the device reaches the up position, to rest on these rims and so prevent the device from returning to the down position.

10. An arrangement according to any one of claims 5 to 9 in which the rear part of the cage is shaped so that the base of the needle slots into this part for the puncture operation.

11. An arrangement according to any one of claims 1 to 10, and which includes resources (14, 27) to prevent the point of the needle exiting via the entrance of the chamber.